

### **REMARKS**

Claims 42-51 and 54 are pending and under consideration. Claims 42-51 and 54 were rejected. With this Amendment, claims 42 and 43 were amended. Accordingly, claims 42-51 and 54 remain at issue.

#### **I. 35 U.S.C. ¶ 112 Indefiniteness Rejection of Claims**

Claims 42-51 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection. Applicants have amended claim 42 to recite a range of 20 to 95 mol% which Applicants maintain is supported by the specification. Accordingly, Applicants respectfully request withdrawal of this rejection.

#### **II. 35 U.S.C. § 103 Obviousness Rejection of Claims**

Claims 42-51 and 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 0818474, EP 0818420 and Inagaki et al. in view of DE 4444032, Elfine, Monick et al., Horton, and Ramirez et al. Applicants respectfully traverse this rejection.

Claims 42-51 of the present invention are directed toward a cleansing method comprising providing a cleansing processing agent comprising a polymer having an acrylonitrile unit, a unit selected from the group consisting of styrene, conjugated diene, and a combination thereof, hydrophilic groups being introduced into said acrylonitrile unit by adding an acid or an alkali thereto, and ion groups being introduced into said unit selected from the group consisting of styrene, conjugated diene, and a combination thereof, said polymer comprising 20 to 95 mol% of

said unit selected from the group consisting of styrene, conjugated diene and a combination thereof. The cleansing processing agent shows improved hydrophilicity and ionic adsorption as a cleansing processing agent for waste materials. Claims 42-51 recite a ratio of 20 to 95 mol% for the polymer to allow the ion groups to act as active points to absorb heavy metal, ammonia, and amine compounds and at the same time be water permeable.

*Inagaki et al.* (U.S. Patent No. 6,022,928) teaches a method of manufacturing a polyelectrolyte having the step of sulfonating polystyrene resin. *Ramirez et al.* (US Patent No. 4,219,416) teaches a method to remove heavy metals from mining wastewater, and is specially drawn to a method for the recovery of tungsten and molybdenum. A recovery method for heavy metals from aqueous solutions, especially dilute aqueous solutions is discussed. *Monick et al.* (US Patent No. 4,765,908) teaches a treatment composition and method for removing contaminants from wastewater in the form of a nonleachable sludge. *Elfine* (US Patent No. 4,902,665) teaches a method of treating a heavy metal containing and/or a radioactive metal-containing natural water or liquid. However, none of these references teach a cleansing processing agent comprising a polymer having an *acrylonitrile unit and a unit* selected from the group consisting of *styrene, conjugated diene*, and a combination thereof.

Accordingly, Applicants submit that the claimed invention is neither anticipated by, nor obvious over, the applied references, either alone or in combination. In view of the foregoing, it is submitted that the pending Claims are patentable over the applied references. Withdrawal of these grounds of rejection is respectfully requested.

**III. Conclusion**

In view of the above amendments and remarks, Applicants submit that all claims are clearly allowable over the cited prior art, and respectfully request early and favorable notification to that effect.

Respectfully submitted,

Dated: June 17, 2004

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